

Purified Water Supply System For High Demand Devices and Applications

Abstract

A water supply sub-system for connection to a main water supply system includes a storage tank having an inlet with a flow control valve for connection to the main water supply system. The sub-system may be disconnected from the main system and configured as a closed system for disinfecting the sub-system. An outlet line connects the storage tank to a pump that pumps water from the tank to a sub-system supply line. One or more branch connections may connect the sub-system supply line to high-demand water using devices, such as dialysis machines. The supply line may be a feedback loop. A shunt feedback loop parallel to the feedback loop of the supply line has a pressure control valve that regulates pressure in the supply line feedback loop. A filtration device may also be included to ensure the purity of the water circulating through the sub-system.